

1. The first step is to identify the key components of the system. This includes understanding the hardware, software, and data involved.

2. The second step is to define the requirements. This involves determining what the system needs to do and what it must be able to handle.

3. The third step is to design the system. This includes creating a detailed plan for how the system will be built and how it will be tested.

4. The fourth step is to implement the system. This involves building the system according to the design and testing it to ensure it works as intended.

5. The fifth step is to maintain the system. This involves keeping the system up-to-date and ensuring it continues to work properly over time.

Monday, July 26, 2010 1:19:47 PM

Accept

**Setup Start**

Stop

Cust Item ID:

Start Date: 7/26/2010 **Start Qty:** 2.00

[illegible]

Customer:

Required Date: 8/3/2010 Req'd Qty: 2.00

[illegible]

Reference:

Run Start

[illegible]

Approvals: **Process Plan:**

Date: 10-7-26

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Abstract

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 60889

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Page 2

Item ID: D3562-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Assembly, RH

Start Date: 7/26/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 8/3/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00	SAD 10-08-26			2	0		
140 Small Fab Small Fab	Small Fab Memo 1- Drill Rivet holes as per dwg D3562. Touch up alodine 2- Rivet legs using Magnabond as per dwg D3562. *****Ensure to wipe off any excess magnabond ***** A/R Magnabond 6398 Batch: 110805 m114158	0.00 0.00	10-08-27			2	0		
150 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	8/10/06/27						

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Work Order ID 60889

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Item ID: D3562-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Step Assembly, RH

Start Date: 7/26/2010 Start Qty: 2.00

Required Date: 8/3/2010 Req'd Qty: 2.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024.
A/RAluminum Rod *M112860*
2-Grind end cap welds flush as per Dwg D3562

10-08-30 2

170

0.00



QC

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

Quality Control

2 - 8/10/08/30

180

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

*8/10/08/30**42*
AH

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 60889

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Item ID:	D3562-042	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Step Assembly, RH					
Start Date:	7/26/2010	Start Qty:	2.00			
Required Date:	8/3/2010	Req'd Qty:	2.00			
Reference:						
				Cust Item ID:		
				Customer:		

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				<i>mm</i>	<i>10</i>	<i>08</i>	<i>31</i> (2)
200 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>mm 11/4/84</i> Memo START TIME: <i>2:20</i> OVEN TEMPERATURE: <i>820</i> FINISH TIME: <i>2:50</i>	0.00 0.00							<i>1 OK 10-08-31.</i>
210 HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <i>115078</i> Memo	0.00 0.00				<i>mm</i>	<i>10</i>	<i>09</i>	<i>01</i> (2)

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 60889

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Item ID: D3562-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Step Assembly, RH

Start Date: 7/26/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 8/3/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

QC3- Inspect Part Finish

0.00

=> Hl

10/09/01



QC

Memo

0.00

Quality Control

VZRH 0

230

Identify as per dwg & Stock Location: 6-A

0.00



Packaging

Memo

w/o 60639

0.00

Packaging

E/S 10/09/01 (2)

240

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/02 HJ

MF

10-9-01

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

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Page 1

Work Order ID: 60889



Parent Item: D3562-042



Parent Item Name: Step Assembly, RH

Start Date: 7/26/2010

Required Date: 8/3/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 06-11-09 JLM
 IPP rev B ECN 987 07.10.09 EC verified by: DD
 IPP Rev:C ECN1048 07-12-18 DD verified by: EC
 IPP Rev:D 08-07-28 add chemical conversion coat DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C Step Extrusion		Manufactured	No			100	Each	105.9200	1	2			
----------------------------------	--	--------------	----	--	--	-----	------	----------	---	---	--	--	--

Location	Loc Qty	Loc Code
WA	105.92	
55214	3.92	
58544	102	

D2734 Step End Plate		Manufactured	No			140	Each	7.0000	2	4			
-----------------------------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

Location	Loc Qty	Loc Code
WA	7	
360216	7	
55014	7	

D3560-042 Arm Weldment		Manufactured	No			140	Each	10.0000	1	2			
-------------------------------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

Location	Loc Qty	Loc Code
WA	10	
47864	2	
48386	8	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 2

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Work Order ID: 60889

Parent Item: D3562-042

Parent Item Name: Step Assembly, RH

Start Date: 7/26/2010

Required Date: 8/3/2010

Start Qty: 2.00

Required Qty: 2.00

D3560-044

Manufactured No

140 Each

11.0000

1

2



Arm Weldment



210.08.26

LocationLoc QtyLoc Code

WA

11

47866

4

48388

7

2

MS20600-AD4W5

Purchased No

160 Each

728.0000

32

64



Blind Rivet



210.08.26

LocationLoc QtyLoc Code

ST321

728

111477

428

114382

300

64

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Shop Packet Print

Page 2

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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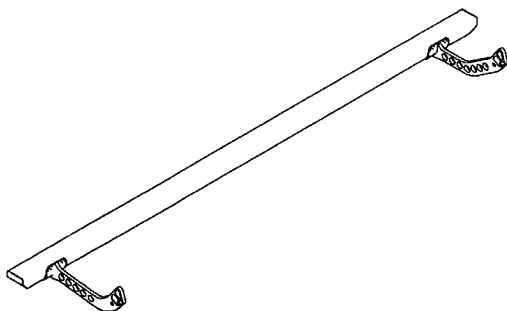
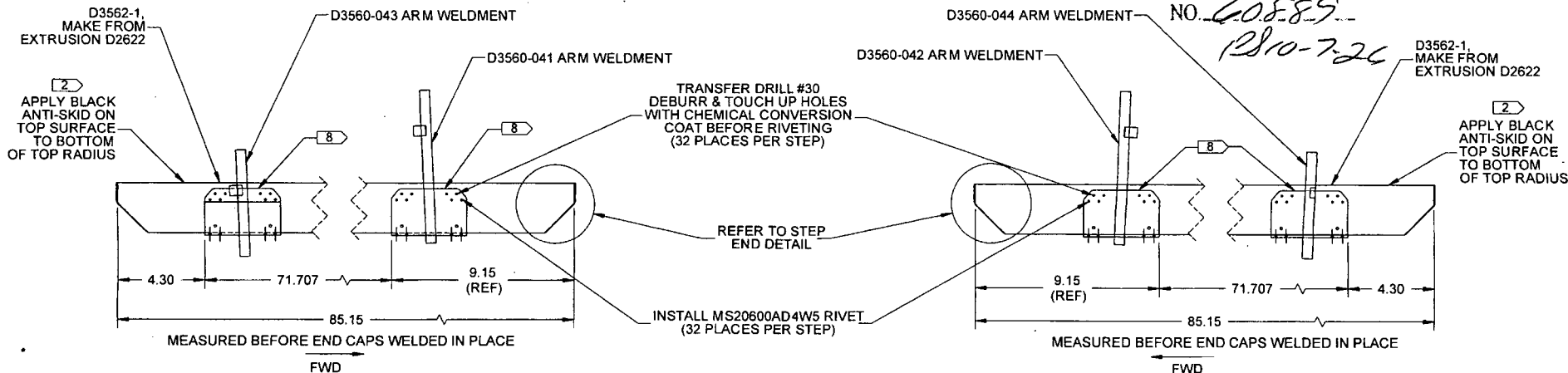
NOTE: Date & initial all entries

WITHOUT NOTICE

WORK ORDER

NO. 60589

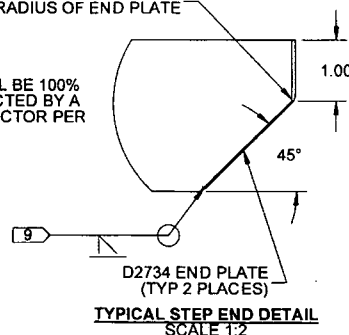
1210-7-26



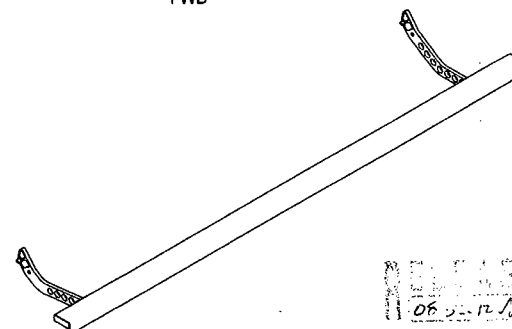
D3562-041 LH STEP ASSEMBLY

ROUND CORNER OF EXTRUSION TO MATCH BEND RADIUS OF END PLATE

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



TYPICAL STEP END DETAIL
SCALE 1:2



D3562-042 RH STEP ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH:
 - i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
 - ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
 - iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X	X	D3562-041	LH STEP ASSEMBLY
		D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4W5	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE: REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN	gp	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	sk		
CHECKED	le	DRAWING NO.	REV. E
MFG. APPR.		D3562	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		STEP ASSEMBLY	1:5
DATE	08.01.11	COPYRIGHT © 2006 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

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